

Toying Around

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A parent bought an expensive toy and after removing it from its gleaming box gave it to the child with a warning, 'Handle it carefully, don't break it'. The toy had rounded corners so the child could not even feel its edges. She couldn't hammer it on the ground as it was made of plastic. It had no smell or taste. Within three minutes flat the child had left the neatly rounded plastic toy in the corner, and was merrily playing with its box. She knew that she would not be scolded for throwing the box on the floor. From her own viewpoint the little girl had made an intelligent assessment of the toy.

Today, children are inundated with expensive toys. Parents seem to be in a hurry to buy the latest toys with flashing lights and sounds. Pedagogic learning is now associated with gloss and gleam. Children play with such toys for a while and then they throw them away. Instant gratification, instant forgetfulness seems to be the norm.

Children need large chunks of time to play and mess around with things they like. This is how they construct their own knowledge patterns. According to Rabindranath Tagore, the best toys are those which are innately incomplete and which a child completes with her participation.

As a child, my daughter was gifted many expensive toys. But she was happiest playing with spoons and pots in the kitchen. Whenever we broke a coconut to make chutney we would preserve all the pieces of the hardwood in the washed plastic milk bag. In her spare time she really enjoyed putting the pieces together to make a wooden ball. This was akin to a three-dimensional jigsaw.

Children are eternal explorers. In their free moments they are experimenting and improvising. They are always making and inventing things out of odd bits and trinkets. They learn a great deal from ordinary, organic things found around the house, and without being taught. The main thing about scrap is that children can use it freely without adult admonishment.

Traditionally children in India made their own toys — sometimes with the help of adults, often by themselves. Old pieces of leftover cloth were recycled into dolls and puppets. Empty matchboxes were

favorites for making dressing tables and houses. Crown caps made lovely gears. Old newspapers were wonderful for making caps one could wear. And one made several kinds of whistles using leaves and scraps of paper. Over a hundred such handmade, self-made toys have been documented by Sudarshan Khanna, a professor at National Institute of Design, in his fascinating book, *The Joy of Making Indian Toys*.

In today's context these toys can only be described as minimalist and eco-friendly. Since everything mattered nothing was ever destroyed, only reincarnated. These toys are a salute to the genius of Indian children. Much before the onslaught of the Barbies and Skullman — sexist and violent toys, children made their own toys and had loads of fun.

They used local materials, often throwaway discards which didn't cost any money. Even poor children could enjoy them. Traditional toys evolved over centuries. Someone tried a simple design. Others added to it, and still other generations refined it to perfection. So the aesthetics, simplicity, utility, cost-effectiveness of a vernacular toy is a product of years, maybe centuries of R&D effort. And it is left behind in the public domain for subsequent generations to enjoy — magnanimity in an era of constipated patent regimes.

'The best thing a child can do with a toy is to break it', might sound like an anarchistic slogan. But there is great deal of truth in it. Every curious child would want to rip open a toy to peep into its 'tummy'. Good toy designs invite children to pull them apart and put them back again. The *Mecanno* is a classic example. Children with fertile imaginations make far more things with the generic pieces of the *Mecanno* than are listed in the manual.

Children learn best with familiar things. In 1907, Yakub Perelman, father of Russian popular science, published a book *Fun with Physics*, in which he used roubles and kopeks as weights. Coins are minted and therefore have standard weights. Coins are also accessible to the poorest children. A century later none of our puritanical science textbooks start on 'weights' with coins. What is the weight of an ordinary matchstick? Many science graduates wouldn't have a clue to this simple question. Our feel for things and phenomena are very crude. Our estimates of length, area, volume, weight and time are often off the mark. These concepts are merely 'covered' in the course curriculum and remain empty words. Before children can understand a thing they need experience: Seeing, hearing, touching, arranging, taking things apart, and putting them together.

They need to experiment with real things. Children require a lot of

experience, with different materials and situations before they start making sense of the world.

The biggest crisis of Indian design is that educated people do not wish to dirty their hands. And there are no good schools for children of artisans. Burettes, pipettes, test tubes and fancy glassware often threaten children. Fortunately, in most schools they are kept locked in the cupboards with a grime of dust covering them. The need of the day is to do more with less. The great pioneers of science did their work with simple equipment. It is possible to follow in their footsteps. After all, the child's mind is the most precious piece of equipment involved.

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